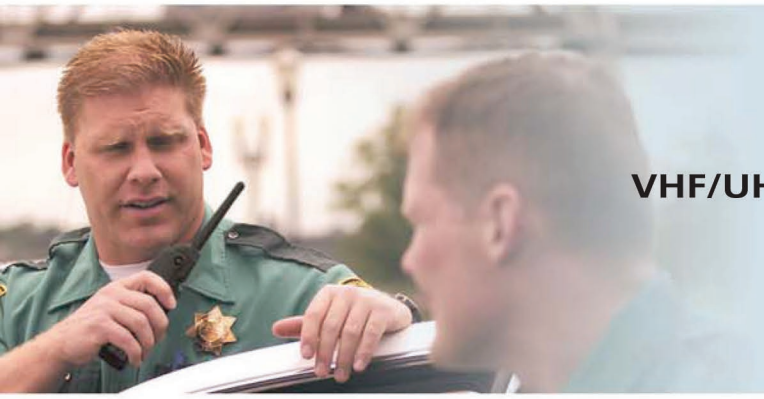
KENWOOD

Listen to the Future

ADVANCED WIRELESS COMMUNICATIONS



TK-5210/5310

VHF/UHF FM & Project 25 Digital Portable Radios

P25 FleetSync® by KENWOOD

GENERAL FEATURES

- 5 Watt (136-174 MHz)
- 4 Watt (450-520, 380-470 MHz)
- 50 Zones / 512 Channels (K-K6)
- 16 Zones / 64 Channels (K7)
- Personality Lists
- Backlit Dot Matrix LCD[1]
- 16 Character Alphanumeric Aliases[1]
- 3-Digit Sub-Display[1]
- Function / Status LCD Icons[1]
- RSSI Indicator
- Transmit / Busy / Call Alert / Warn LED
- On/Off Volume Knob
- 16-Position Selector Knob
- 2-Position PF Lever Switch
- 3-Position PF Concentric Switch
- 4 Front Menu-Driven PF Keys[1]
- 3 Side PF Keys
- Orange Emergency / AUX Key
- 12-Key DTMF / PF Keypad[2]
- Enhanced Kenwood Audio
- Voice Annunciation
- VOX Ready
- Emergency Features
- Tactical Group[1]
- Battery Level Indicator[1]
- Transceiver Password[1]
- Date & 12/24 Hour Time Clock[1]
- Windows® Programming & Tuning[3]
- Windows® Firmware Uploading[3]
- Self-Programming & Tuning[1]
- Cloning[1]
- Easy Option Port
- Weather-Sealed Accessory Connector
- MIL-STD-810 C/D/E/F
- IP54/55 Water & Dust Protection
- Immersion (IP66/67) Option
- Intrinsically Safe Option

SCAN TYPES (FM & P25)

- Single Zone/Multi-Zone Scan
- Scan Lists
- Conventional Scan
- Limited Talk Group Scan[4]
- Priority Monitor Scan[4]
- Dual Priority Scan

FM

- QT / DQT
- Operator Selectable Tone
- Two-Tone Decode / Encode
- DTMF Encode / Decode / Stun
- Special Alert Tone Patterns[5]
- Encryption / ANI Board Control
- Companded Audio

FleetSync® (FM)

- FleetSync® or FleetSync® II
- PTT ID Digital ANI
- Caller ID Display
- Status Messaging
- Emergency & Stun Statuses
- Selective & Group Call
- Text Messaging

P25 DIGITAL

- P25 Digital Conventional
- P25 Digital Trunking Option
- IMBE™ VOCODER
- Talk Group ID Lists
- Individual ID Lists
- Caller ID Display
- Remote Monitor/Remote Check
- Radio Inhibit
- Encryption Key Delete
- Encryption Key Zeroize (SCM required)
- Encryption Key Retention (SCM required)
- DES Encryption Options
- AES / DES Encryption Options[7]
- KPG-93 KVL Key Loader Interface Cable[6]

Three models available:
Basic Unit: No LCD, No front Keys
16-Character LCD, 4 Menu-driven PF Keys
16-Character LCD, 4 Menu-driven PF Keys, 12-Key DTMF/PF Keypad
(Not actual size)

Options

- **KNB-32N** Ni-MH Rechargeable Battery Pack (2500 mAh)
- **KNB-41NC** Ni-MH Battery Pack Intrinsically Safe (2500 mAh)

- **KBP-6** Battery Case

- **KSC-32** Tri-chemistry Rapid Charger

- **KPG-93** Keyloader Interface Cable

- **KRA-25** VHF High Gain Antenna

- **KRA-26** VHF Helical Antenna

- **KRA-27** UHF Whip Antenna

- **KRA-28** VHF Broad Band Antenna (140-170 MHz)

- **KRA-29** UHF Broad Band Antenna (380-430 MHz)

- **KMC-25** Speaker Microphone

- **KMC-26** Speaker Microphone with Antenna Connector

- **KEP-1** Heavy Duty Earphone

- **KHS-11** 2-Wire Palm Mic with Earphone

- **KHS-14** Lightweight Single Muff Headset

- **KHS-15-BH** Heavy Duty Behind-the-Head Headset

- **KHS-15-OH** Heavy Duty Over-the-Head Headset

- **KBH-11** Belt Clip (2.5")

All accessories and options may not be available in all markets.
Contact an authorized Kenwood dealer for details and complete list of all accessories and options.

Specifications

Model	TK-5210	TK-5310
GENERAL		
Models (Type 1)		
Basic Model	TK-5210K	TK-5310K
4-key w/LCD Model	TK-5210K2/K7	TK-5310K2
Full key w/LCD Model	TK-5210K3	TK-5310K3
Models (Type 2)		
Basic Model		TK-5310K4
4-key w/LCD Model		TK-5310K5/K7
Full key w/LCD Model		TK-5310K6
Frequency Range		
Type 1	136-174 MHz	450-520 MHz
Type 2		380-470 MHz
Max. Channels per Radio	512 / 64 (K7 model)	
Zones	50 / 16 (K7 model)	
Max. Channels per Zone	250 / 64 (K7 model)	
Channel Spacing		
Analog	12.5 / 15 / 20 / 25 / 30 kHz	12.5 / 25 KHz
Digital	12.5 kHz	12.5 kHz
Operating Voltage	7.5 VDC ± 20 %	
Battery Life 5-5-90 (10-10-80) duty cycle		
KNB-32N, 7.5 VDC, 2500 mAh	12 hours (8 hours)	
KNB-41NC, 7.5V DC, 2500mAh	12 hours (8 hours)	
KBP-6, AA Alkaline x6 Batteries (@ 1W)	8 hours (5 hours)	
Operating Temperature Range	-22° F to +140° F (-30° C to +60° C)	
Frequency Stability (-22° F to +140° F)	± 2.0 ppm	
Antenna Impedance	50 Ω	
Dimensions (W x H x D) (projections not included)		
with KNB-32N	2.28 x 6.10 x 1.80 in. (58 x 155 x 45.7 mm.)	
with KNB-41NC	2.28 x 6.10 x 1.84 in. (58 x 155 x 46.7 mm.)	
with KBP-6	2.36 x 6.10 x 1.84 in. (60 x 155 x 46.7 mm.)	
Weight (Radio only)		
Basic Model	11.11 oz. (315 g)	
4-key w/LCD Model	11.64 oz. (330 g)	
Full key w/LCD Model	11.64 oz. (330 g)	

Model		TK-5210	TK-5310
GENERAL			
Weight with antenna & Belt Clip (4-Key w/LCD model)			
with KNB-32N		23.28 oz. (660 g)	
with KNB-41NC		24.00 oz. (680 g)	
FCC ID	Type 1	ALH35733110	ALH39913110
	Type 2		ALH39913120
IC Certification	Type 1	282D-35733110	
	Type 2		282D-39913120
RECEIVER			
Sensitivity			
Digital (5 % BER)		0.25 µV	
Digital (1 % BER)		0.40 µV	
Analog 12 dB SINAD		0.25 µV	
Selectivity			
Digital		-60 dB	
Analog @ 25/30 kHz		-78 dB	-75 dB (25 KHz)
Analog @ 12.5 kHz		-67 dB	
Intermodulation Distortion			
Digital		-75 dB	
Analog @ 25/30 kHz		-75 dB	-75 dB (25 KHz)
Analog @ 12.5 kHz		-68 dB	
Spurious & Image			
Digital		-80 dB	-75 dB
Analog		-80 dB	-75 dB
Audio Distortion			
Digital		Less than 1.5 %	
Analog		Less than 2 %	
Audio Output		500 mW / 8 Ω	
TRANSMITTER			
RF Power Output		5 W / 1 W	4 W / 1 W
Spurious & Harmonics		70 dB	
FM Hum & Noise			
Analog @ 25 kHz		50 dB	48 dB
Analog @ 12.5 kHz		45 dB	42 dB
Audio Distortion		Less than 2 %	
Modulation		16K0F3E, 11K0F3E, 8K10F1E, 8K10F1D	

Applicable MIL-STD & IP

Standard	MIL 810C Methods/Procedures	MIL 810D Methods/Procedures	MIL 810E Methods/Procedures	MIL 810F Methods/Procedures
Low Pressure	500.1/Procedure I	500.2/Procedure I, II	500.3/Procedure I, II	500.4/Procedure I, II
High Temperature	501.1/Procedure I, II	501.2/Procedure I, II	501.3/Procedure I, II	501.4/Procedure I, II
Low Temperature	502.1/Procedure I	502.2/Procedure I, II	502.3/Procedure I, II	502.4/Procedure I, II
Temperature Shock	503.1/Procedure I	503.2/Procedure I	503.3/Procedure I	503.4/Procedure I, II
Solar Radiation	505.1/Procedure I	505.2/Procedure I	505.3/Procedure I	505.4/Procedure I
Rain	506.1/Procedure I, II	506.2/Procedure I, II	506.3/Procedure I, II	506.4/Procedure I, III
Humidity	507.1/Procedure I, II	507.2/Procedure II, III	507.3/Procedure II, III	507.4
Salt Fog	509.1/Procedure I	509.2/Procedure I	509.3/Procedure I	509.4
Dust	510.1/Procedure I	510.2/Procedure I	510.3/Procedure I	510.4/Procedure I, III
Vibration	514.2/Procedure VIII, X	514.3/Procedure I	514.4/Procedure I	514.5/Procedure I
Shock	516.2/Procedure I, II, V	516.3/Procedure I, IV	516.4/Procedure I, IV	516.5/Procedure I, IV
Immersion(option)	512.1/Procedure I	512.2/Procedure I	512.3/Procedure I	512.4/Procedure I
International Protection Standard				
Dust & Water Protection	IP54/55			
Dust & Water Jet Intrusion	IP66*			
Immersion	IP67*			

**IP66/67 Optional Package*

Analog measurements made per TIA/EIA 603
Digital measurements made per TIA/EIA 102CAAA

Kenwood reserves the right to change specifications without prior notice or obligation.
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Windows® is a registered trademark of Microsoft Corporation in the United States and other countries.
IMBE™ is a trademark of Digital Voice Systems Inc.
The P25 Logo is used under license and is a registered trademark of the Project 25 Technology Interest Group.

footnotes from front:
1. *LCD models only.*
2. *LCD, keypad model only.*
3. *KPG-95D Software: Windows® 98/INT/2000/Me/XP compatible.*
4. *P25 Trunking Option required.*
5. *Operates for 2-Tone, DTMF, FleetSync® selective calling in FM mode only.*
6. *KPG-93 adapts the Motorola®, KVL3000/3000 Plus Key Loader to the TK-5210/5310.*
7. *K7 model is not compatible with AES / DES encryption options.*

KENWOOD

ADVANCED WIRELESS COMMUNICATIONS

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ISO9001 Registered
Communications Equipment Division
Kenwood Corporation
ISO9001 certification

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